Complete Summary

GUIDELINE TITLE

SOLUTIONS® wound care algorithm.

BIBLIOGRAPHIC SOURCE(S)

ConvaTec. SOLUTIONS wound care algorithm. Princeton (NJ): ConvaTec; 2005. 8 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute and chronic wounds including arterial, diabetic, pressure, venous, or mixed arterial-venous ulcers

GUIDELINE CATEGORY

Evaluation
Management
Risk Assessment
Treatment

CLINICAL SPECIALTY

Dermatology
Family Practice

Geriatrics
Internal Medicine
Physical Medicine and Rehabilitation
Plastic Surgery
Podiatry

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Nurses
Physical Therapists
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To facilitate health care professionals' decision making by providing stepwise management and evaluation strategies for wound care

TARGET POPULATION

Patients with acute and chronic wounds

INTERVENTIONS AND PRACTICES CONSIDERED

1. Assessment for signs and symptoms of infection
2. Evaluation of depth, surrounding skin, and wound edges
3. Cleansing and debridement of wound (autolytic, enzymatic, or surgical debridement)
4. Wound dressing (moisture retentive dressing, wound hydration, exudate management)
5. Reduction of risk factors for developing chronic ulcers and delayed healing
6. Patient education and support
7. Treatment of infections, as needed
8. Assessment and management of wound pain and odor
9. Re-evaluation

MAJOR OUTCOMES CONSIDERED

Wound healing

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The development of the initial algorithms, and their subsequent content validation in 2001, is based on evidence obtained from Medline and CINHAL literature searches for the time period between 1992 and 2001. The Medline search was updated again in 2005, covering the period 2001-2005. No further changes to the algorithm were required as a result of that search.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review
Review of Published Meta-Analyses

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Other

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Two validated wound assessments were used as the basis for wound care decisions (e.g., (1) Maintain a moist wound environment. (2) Absorb excess exudate. (3) Hydrate a dry wound). Wound assessments guiding treatment choices included the validated Pressure Sore Status Tool (PSST) and an adaptation of that tool, the Bates-Jensen Wound Assessment Tool (BWAT).

Two cross-sectional quantitative content validation surveys (see the "Availability of Companion Documents" field) assessed and analyzed the content validity of wound care decisions based on PSST and BWAT assessments respectively. They both used a 4-point Likert scale to rate clinical relevance of each item in the algorithm: 1=not relevant, 2=unable to assess relevance without further information; 3 = relevant but needs minor attention (specified in comments section); 4=very relevant and succinct.

The survey results were used to formulate the recommendations.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

Published cost analyses were reviewed from the literature. Kerstein et al (2001) was identified as an appropriate model for conducting the economic analysis. Telemedicine costs (the most costly format for Solutions® algorithms in the cohort study) were added to 12-week healing costs reported in the model. Using the most common wound dressing applied during the prospective cohort study, (i.e., the hydrocolloid dressing DuoDERM) would save U.S. $969 for every pressure ulcer healed during 12 weeks or $766 for every venous ulcer healed, as compared to gauze.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Trial Implementation Period

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Each step in the Solutions® algorithms was formally content validated by wound care professionals (44 wound care nurses in 1998–1999). The final version was again content validated by a multidisciplinary group of 21 invited global opinion leaders in wound care, including physicians of varying specialties, nurses, and other wound care specialists. This process also measured clinical healing outcomes during real-world use of the algorithms.

See the "Availability of Companion Documents" field.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The recommendations for wound care are presented in the form of 8 algorithms. Each algorithm corresponds to one of the following observed wound assessments:

- Dry wound, minimal moisture: >25% necrotic tissue/fibrin slough
- Dry wound, minimal moisture: <25% necrotic tissue/fibrin slough
- Moist-lightly exuding: >25% necrotic tissue/fibrin slough
- Moist-lightly exuding: <25% necrotic tissue/fibrin slough
- Moist-moderately exuding: >25% necrotic tissue/fibrin slough
- Moist-moderately exuding: <25% necrotic tissue/fibrin slough
- Wet-heavily exuding: >25% necrotic tissue/fibrin slough
- Wet-heavily exuding: <25% necrotic tissue/fibrin slough

CLINICAL ALGORITHM(S)

Eight (8) detailed clinical algorithms are provided in the original guideline document for:

- Dry wound, minimal moisture: >25% necrotic tissue/fibrin slough
- Dry wound, minimal moisture: <25% necrotic tissue/fibrin slough
- Moist-lightly exuding: >25% necrotic tissue/fibrin slough
- Moist-lightly exuding: <25% necrotic tissue/fibrin slough
- Moist-moderately exuding: >25% necrotic tissue/fibrin slough
- Moist-moderately exuding: <25% necrotic tissue/fibrin slough
- Wet-heavily exuding: >25% necrotic tissue/fibrin slough
- Wet-heavily exuding: <25% necrotic tissue/fibrin slough

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Appropriate wound management and evaluation strategies
- Appropriate implementation of chronic wound risk factor assessment and risk reduction programs and interventions
- Prevention of wound complications
- Improved rates of wound healing

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- The cohort study did not include exclusion criteria, so the algorithms were used on all wounds deemed clinically appropriate including pressure, venous, diabetic and arterial ulcers as well as non- or slowly-healing surgical or other acute wounds.
- The cohort study used mainly ConvaTec hydrocolloid, alginate or Hydrofiber® primary wound dressings with use of less than 5% gauze dressings. Less acceptable outcomes may result from substituting other products or gauze as the primary wound dressing.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Clinical Algorithm

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

ConvaTec. SOLUTIONS wound care algorithm. Princeton (NJ): ConvaTec; 2005. 8 p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1994 (revised 2004; reviewed 2005)

GUIDELINE DEVELOPER(S)

ConvaTec - Public For Profit Organization

SOURCE(S) OF FUNDING

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GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the ConvaTec Information Center: 1-800-422-8811.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Beitz JM, van Rijswijk L. Using wound care algorithms: a content validation study. J Wound Ostomy Continence Nurs. 1999 Sep;26(5):238-9, 241-9.
- Bolton L, McNees P, van Rijswijk L, de Leon J, Lyder C, Kobza L, Edman K, Scheurich A, Shannon R, Toth M; Wound Outcomes Study Group. Wound-healing outcomes using standardized assessment and care in clinical practice. J Wound Ostomy Continence Nurs. 2004 Mar-Apr;31(2):65-71.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on July 27, 2006. The information was verified by the guideline developer on August 24, 2006.

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